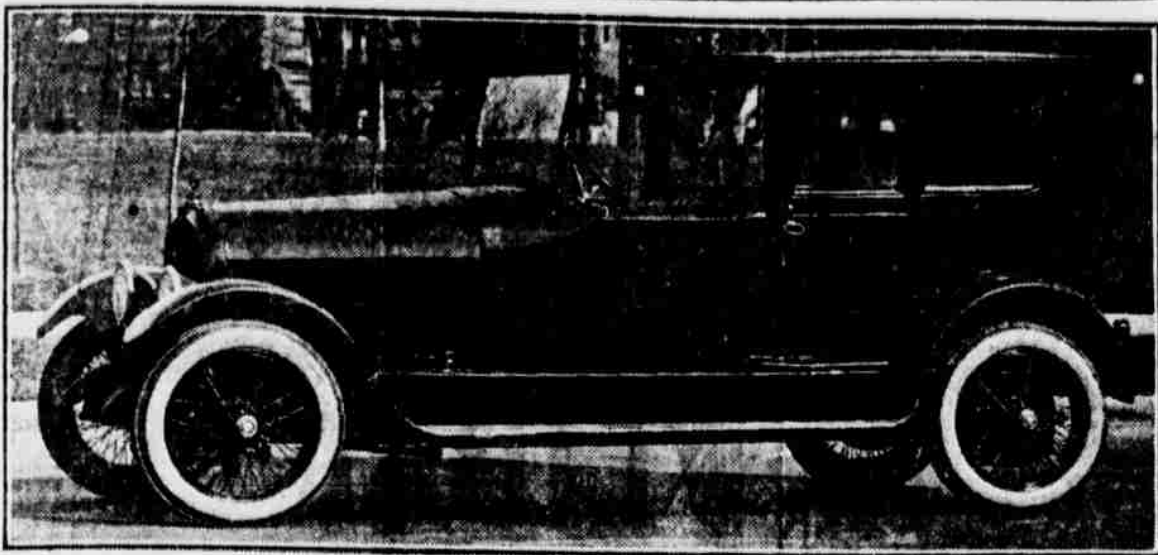


The Beautiful Marmon Rubay Town Car.

MITCHELL CO. HEAD
SOUNDS A WARNING

President Durland Says That Foreign Competition Must Be Met Right Now.

Interviewed on the much discussed subject of foreign competition President D. C. Durland of the Mitchell Motors Company, Inc., of Racine, Wis., makes the following statement:

"It seems to be the general belief among people who are not in position to have definite knowledge on the subject that Europe will be so busy rebuilding and rehabilitating herself that she will not have much time to devote to the promotion of manufacture and industry for some time to come.

"These optimists seem to have the feeling that America, with the wonderful manufacturing equipment inherited from the war, has but to reach out her hand, so to speak, to grasp the trade of the world.

"Nothing could be further from the truth. While there can be no denying the devastation wrought by the war in those sections of Europe which were actually under fire or occupied by the vandals, nevertheless it must be borne in mind that this represents

Makes Mitchells



D. C. DURLAND,
President Mitchell Motors Company,
Inc., of Racine, Wis.

but a small area as compared to the whole and that the factories in the uninjured portions are intact and ready to do business at the old stand.

"Even while the destroyed cities and factories are being rebuilt the others, better equipped than ever owing to the intense production of war materials, will be getting under way.

"Heretofore America has led the way in production methods. Now our best methods are in common use over there, and Europe, once she has learned how, can be expected to turn out good products as cheaply as we can.

"It becomes evident, then," concludes Mr. Durland, "that those who count on a weak and war worn Europe to passively yield the palm of commercial leadership to the United States are due for a rude awakening.

"In a word, if we have excellent manufacturing facilities so has Europe. The question is, What are we going to do with them?"

ESSEX SIMPLICITY APPEALS.

Elimination of Complicated Non-Essentials Important Feature.

"The Essex, which is the only new car to be displayed at the Automobile Show this year, is remarkable for many reasons, one of the most notable of them being its simplicity," said Harry S. Houghton at the show yesterday.

"Ease of operation, simplicity of maintenance and comfort have been kept constantly in view by the designers, and the car itself is built in the factory at Detroit.

"In the past automobile development has been toward a cheap, light car, with economy and low first cost as its chief advantages or toward a car possessing luxury, comfort and endurance at the expense of high first cost and heavy maintenance expense. The Essex combines the advantages of both these types.

"The Essex is so sturdily constructed that long life is assured, while comfort is obtained even on the roughest roads by the long springs and the careful distribution of weight. The seats are real seats and their backs reach to the shoulders. All useless weight has been eliminated, which contributes to the exceptional performance of the car and assures long tire life.

"One of the most marvellous things about the car is the motor, which, although only twenty-nine inches long, develops more than 50 horse-power. The power of the car on hills, its acceleration and smooth flexibility of operation also are notable.

"In its construction nothing has been sacrificed to mere appearance. Its beauty coming from inherent qualities of lines of line and contour and from work correctly done."

OVERLAND FACTORY FIRE FIGHTERS.

Three fire pumps, with a capacity of 1,000 gallons per minute, two steamers and two motor fire engines of 100 and 125 horse-power are at the factory. The factory is situated on the Toledo plant of Willoughby, Ohio, from fire. These are in addition to a sprinkler system capable of discharging 2,400,000 gallons of water per minute.

MARMON 34 WINS
WIDE POPULARITY

Supplied in Varied Models, Open and Closed, and With Special Bodies.

The Marmon 34, a comfortable, high powered car, having a wheelbase of 136 inches, is supplied in a variety of body styles, both open and closed, including five and seven passenger touring cars; a very popular design of four passenger close coupled roadster, with full width rear seat and the entrance by way of the divided front seats; a standard limousine, a landaulet, a town car and a sedan of the non-convertible type with four doors. The open car bodies are all constructed in the Marmon shops.

Aside from the standard closed car types, which offer everything to be desired in an up to the minute car of this kind, special bodies to meet individual requirements may be constructed in comparatively short lengths of time and with certainty that they can be fitted to the Marmon chassis in such a way as to give lasting satisfaction.

The shipping weight of the touring car with full standard equipment, including one spare wheel, is 3,450 pounds, and the four passenger roadster 3,290 pounds. The closed cars weigh 3,500 pounds to 4,000 pounds, according to the style of body and the equipment.

Features of the Car.

These weights are significant when compared with other cars of the same class, which will show that Marmon 34 cars are lighter by 1,100 pounds or more than cars with which they are compared. Marmon 34 closed cars are lighter by 200 to 1,000 pounds than touring cars or roadsters of the same class that are constructed along conventional lines.

The striking features of this car are the extensive use of aluminum, the deep Z section frame, the three piece touring body, the compound cantilever cross suspension type of rear springs and transmission held in suspension on the front end of the torque tube.

Much of the touring body, the fenders, the hood, the radiator shell, part of the rear axle and the transmission case are further examples of aluminum construction.

The compound cantilever cross suspension rear springs give a new comfort in riding, especially in the absence of side sway.

The Marmon 34 touring car in standard touring form attains a speed of more than sixty miles an hour; it will accelerate from ten to fifty miles an hour in about twenty seconds; it may be toured in with comfort and with a feeling of complete safety and security at speeds of fifty to fifty-five miles an hour. The wonderful flexibility of the engine makes it fully the equal of any multi-cylinder engine yet produced, and its operation a marvel of smoothness. The balance is so perfected that the car handles so easily and rides so comfortably that it can be used on long touring trips without fatigue to driver or passengers.

SAXON PLANT NEARLY READY.

New \$1,500,000 Factory Will Be Occupied Soon.

The huge concrete and steel plant built for the Saxon Motor Car Corporation will soon be ready for occupancy. Just as the plant was nearing completion the country was plunged into war. The Government, looking about for warehouses big enough to house the trappings of a nation at war, took over the new Saxon plant for the duration of hostilities. It became a supply depot for a vast treasure in military stores. Aircraft engines, war trucks, officers' cars, filled the big building and soldiers were on guard day and night.

As the Government is able to divert its war materials into civilian uses, its great military warehouses will be emptied. The new Saxon plant will then be available as the ultra-modern home of Saxon Six.

It is within five miles of the centre of Detroit, on a forty acre tract valued at \$5,000 an acre. The property fronts upon a terminal railroad, thus affording excellent shipping facilities.

Hudson Executive



R. C. COLE,
Vice-president, Hudson Motor Car
Company of New York.

AC SPARK PLUG
HELPS WIN WAR

Furnished as Standard Equipment for Liberty Aviation Motor.

The United States, engaged in the greatest of wars, was indeed fortunate in being able to call upon an industry with the facilities for quantity production that the automobile and its allied industries has.

Could France and England have availed themselves of a similar opportunity, the defeat of Germany might have been accomplished at a cost of fewer lives, less time and less money.

The war time achievements of one spark plug manufacturer, in fact, is an excellent example of what sort of cooperation Uncle Sam received from the men who build our automobiles and their component parts.

40,000 Spark Plugs Daily.

At the time the armistice was signed this manufacturer—the Champion Ignition Company of Flint, Mich.—was turning out 40,000 AC spark plugs daily as standard equipment on all Liberty and Hispano-Suiza airplane motors. In addition to its aviation work, the AC

AC Plug Creator



ALBERT CHAMPION.

maker also was supplying spark plugs for all standard Class B military trucks and for tanks and trucks of ordinance as well.

This record production of airplane plugs exceeded the combined output for aviation of either the French, British or other American spark plug makers. It was accomplished with the same help and the same equipment as is used for AC manufacture in peace time.

"Our allies could not have equalled the AC record for airplane spark plug production, even though they had the facilities for making 40,000 spark plugs daily," said an official of the AC company. "The spark plug plant of the French, British and Italian planes were not adaptable for quantity production.

"The spark plugs used by the Allies on airplane engines were of a different design from those spark plugs used on automobiles, trucks and other gasoline motors. Practically all of the foreign spark plugs were made with a mica insulator. The manufacture of such plugs requires so much individual skill that workmen could make very few in a day. This is one of the reasons why these plugs could not be produced in large quantities.

"Plugs made of wrapped mica and with mica washers, moreover, are not easily duplicated. Only a small percentage of them passed the inspectors. The rest were rejected as defective.

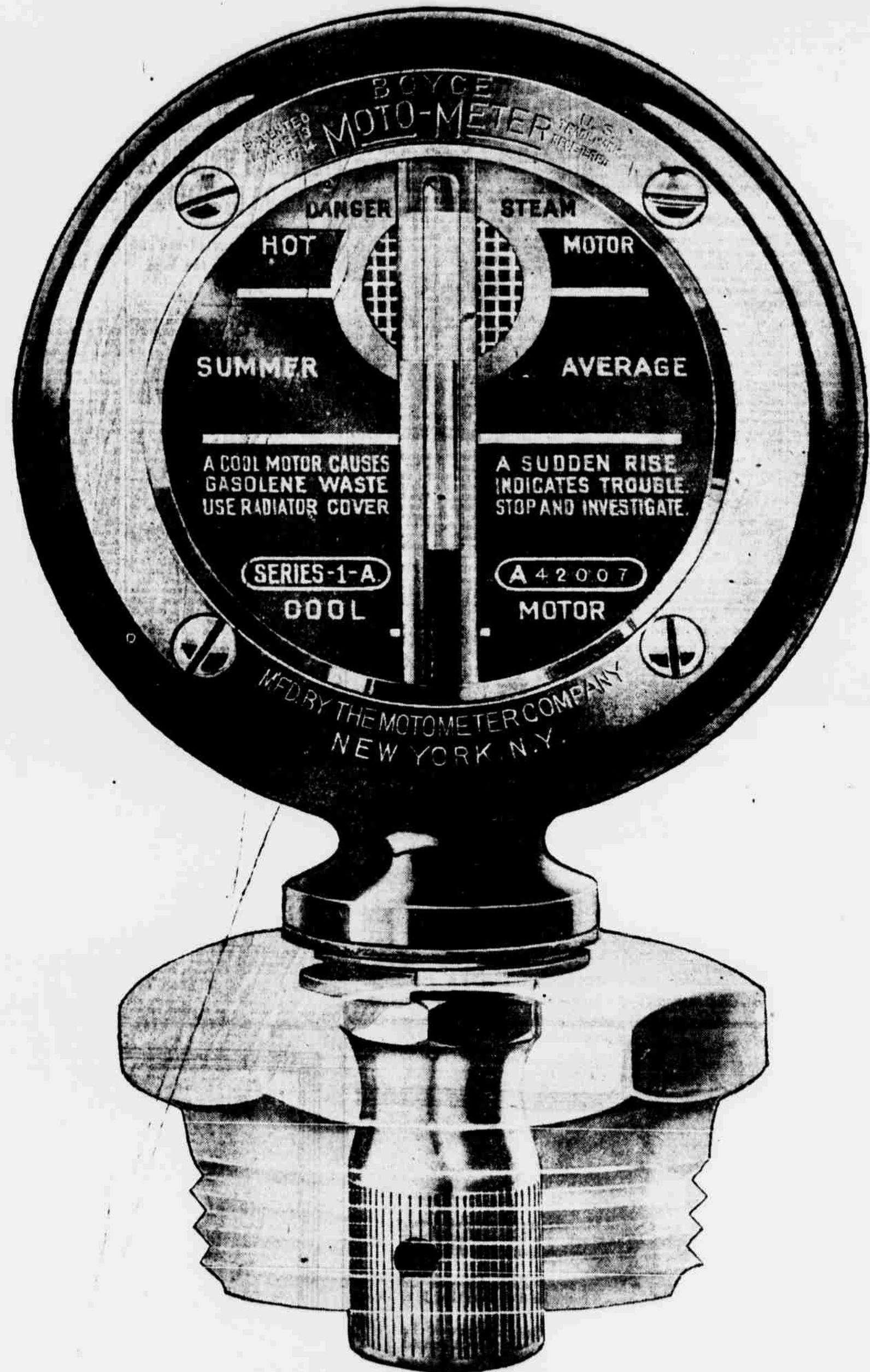
Accomplishes the Impossible.

"Mica was used in the foreign plugs because the French and English were unable to produce porcelain insulators in their laboratories that would withstand the high heat of the aviation motors. Could the foreign ceramic engineers have developed such a porcelain insulator it would have expedited the spark plug manufacture for aviation overseas. For the porcelain insulator permits of machine labor and ready duplication. The human element in manufacture is so small that the chances for defects are reduced to the minimum.

"The AC aviation spark plug has a porcelain insulator. In other words, the scientists in our laboratories accomplished what the ceramic engineers of France and England abandoned as impossible. The heat resisting qualities of the AC, in fact, astounded the members of the allied aviation commission. In the first official test a Liberty motor, AC equipped, ran fifty hours without a change of plugs. From seventy to ninety European spark plugs, fitted with mica insulators, would have been required for a dynamometer run of equal time.

"The AC spark plug, adopted as standard equipment for Liberty and Hispano-Suiza airplane motors, was of the same basic design and made of the same materials as the design and materials used in the manufacture of the AC plugs for passenger cars and motor trucks. Consequently, no time was lost in developing a plug for aviation purposes and in manufacturing equipment and training workmen to make them."

RURAL FOLK LIKE THE OVERLAND. Persons residing in rural communities are the big buyers of passenger cars, according to statistics kept by Willoughby, Inc. Sixty per cent of the Overland and Willoughby cars sold each year go to motorists living in rural districts.

BOYCE
MOTO METERGIVING TWO MILLION MOTORS
THE POWER OF SPEECH

Used as standard equipment by the majority of American manufacturers

May Be Attached to Any Radiator Cap

Your car deserves one—sold by all dealers the world over

Exhibited at the Automobile Show, Booth 302-A, Gallery, Madison Square Garden

THE MOTO-METER COMPANY, Inc.

LONG ISLAND CITY, NEW YORK